

Abstract Submitted  
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**Nonequilibrium transport in the Anderson model of a biased quantum dot**<sup>1</sup> SUNG CHAO, GUILLAUME PALACIOS, Rutgers University, ANDRES JEREZ, New Jersey Institute of Technology, CARLOS BOLECH, Rice university, PANKAJ MEHTA, Princeton University, NATAN ANDREI, Rutgers University — We derive the transport properties of a quantum dot subject to a source-drain bias by means of the Scattering Bethe Ansatz, a generalization of the traditional Thermodynamic Bethe Ansatz to open systems out of equilibrium, which allows a description of the the system in nonequilibrium steady state over the full range of its parameters. Solving the equations at zero temperature and magnetic field we present here the non-linear conductance against the bias voltage with arbitrary tunneling rate and with the gate voltage varying from the mixed valence to the Kondo regime.

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